

What is claimed is:

1. A colorant for use in tinting contact lenses, the colorant comprising one or more pigments, one or more solvents, and a binding polymer, wherein the binding polymer is capable of forming an interpenetrating polymer network with a lens material.
2. The colorant of claim 1, wherein the interpenetrating polymer network formed is a semi-interpenetrating polymer network.
3. The colorant of claim 1, wherein the interpenetrating polymer network formed is a sequential-interpenetrating polymer network.
4. The colorant of claim 1, wherein the binding polymer comprises a molecular weight of about 7,000 to about 40,000.
5. The colorant of claim 1, wherein the binding polymer comprises:

$$\text{CH}_3(\text{CH}_2)_x\text{-L-COCHR=CH}_2$$
 wherein L is -NH or oxygen, x is a whole number from 2 to 24, R is a C₁ to C₆ alkyl or hydrogen.
6. The colorant of claim 1, wherein the binding polymer comprises a copolymer of methacrylic acid, 2-hydroxyethyl methacrylate, and lauryl methacrylate.
7. The colorant of claim 1, wherein the binding polymer comprises a copolymer of 2-hydroxyethyl methacrylate and methacrylic acid.
8. The colorant of claim 1, wherein the binding polymer comprises a homopolymer of 2-hydroxyethyl methacrylate.

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9. The colorant of claim 1, 2, 3, 4, 6, 7 or 8, wherein the one or more solvents comprises at least one medium boiling point solvents and one low boiling point solvent.
- 5 10. The colorant of claim 1, 2, 3, 4, 6, 7 or 8, wherein the surface tension is \leq 28 dynes/cm.
- 10 11. The colorant of claim 6, 7 or 8 wherein the medium boiling point solvents comprise 1-ethoxy-2-propanol and isopropyl lactate.
12. The colorant of claim 1, 2, 3, 4, 6, 7 or 8, further comprising a plasticizer and an opacifying agent.
- 15 13. The colorant of claim 12, comprising about 0.2 to about 25 weight percent of the one or more pigments, about 30 to about 45 weight percent of the binding polymer, about 40 to about 70 weight percent of the one or more solvents, about 0 to about 25 weight percent of the opacifying agent, and about 0.2 to about 7 weight percent of the plasticizer.
- 20 14. A colorant for use in tinting contact lenses, the colorant comprising one or more pigments, one or more solvents, and a binding polymer having a molecular weight of about 7,000 to about 40,000, wherein the binding polymer is capable of forming a interpenetrating polymer network with a lens material comprising a HEMA-based hydrogel or a silicone-based hydrogel.
- 25 15. The colorant of claim 14, wherein the interpenetrating polymer network formed between the binding polymer and the lens material is a semi-interpenetrating polymer network
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16. The colorant of claim 14, wherein the interpenetrating polymer network formed between the binding polymer and the lens material is a sequential interpenetrating polymer network
- 5 17. The colorant of claim 14, wherein the binding polymer comprises a copolymer of methacrylic acid, 2-hydroxyethyl methacrylate, and lauryl methacrylate.
- 10 18. The colorant of claim 14, wherein the binding polymer comprises a copolymer of methacrylic acid and 2-hydroxyethyl methacrylate.
19. The colorant of claim 14, wherein the binding polymer comprises a homopolymer of 2-hydroxyethyl methacrylate.
- 15 20. The colorant of claims 14-19, wherein the one or more solvents comprises two medium boiling point solvents and one low boiling point solvent.
21. The colorant of claim 20, wherein the two medium boiling point solvents comprise 1-ethoxy-2-propanol and isopropyl lactate.
- 20 22. The colorant of claims 14-19 further comprising a plasticizer and an opacifying agent.
- 25 23. The colorant of claim 22, comprising about 0.2 to about 25 weight percent of the one or more pigments, about 30 to about 45 weight percent of the binding polymer, about 40 to about 70 weight percent of the one or more solvents, about 0 to about 25 weight percent of the opacifying agent, and about 0.2 to about 7 weight percent of the plasticizer.

24. A method for manufacturing a tinted contact lens comprising the steps of:
a.) applying to a molding surface of a mold a tinting-effective amount of a
colorant comprising one or more pigments, one or more solvents and a
binding polymer; b.) dispensing a lens-forming amount of a lens material
into the mold; c.) swelling the colorant in the lens material; and d.) curing
the lens material in the mold to form the tinted contact lens, wherein the
binding polymer and the lens material form an interpenetrating polymer
network.
25. The method of claim 24, wherein the binding polymer has a molecular
weight of about 7,000 to about 40,000 and the lens material comprises
HEMA based hydrogels or silicone-based hydrogels.
26. The method of claim 24, wherein the binding polymer comprises a
copolymer of methacrylic acid, 2-hydroxyethyl methacrylate, and lauryl
methacrylate.
27. The method of claim 24, wherein the binding polymer comprises a
copolymer of methacrylic acid and 2-hydroxyethyl methacrylate.
28. The method of claim 24, wherein the binding polymer comprises a
homopolymer of 2-hydroxyethyl methacrylate.
29. The method of claim 24 or 25, wherein the one or more solvents
comprises two medium boiling point solvents and one low boiling point
solvent.
30. The method of claim 29, wherein the two medium boiling point solvents
comprise 1-ethoxy-2-propanol and isopropyl lactate.

31. A mold for use in manufacturing a tinted contact lens comprising a first and second mold half, wherein at least one molding surface of the first and second mold halves comprises one or more pigments, one or more solvents, and a binding polymer, wherein the binding polymer is capable of forming an interpenetrating polymer network with a lens material.
32. The mold of claim 31, wherein the interpenetrating polymer network formed between the binding polymer and the lens material is a semi-interpenetrating polymer network.
33. The mold of claim 31, wherein the interpenetrating polymer network formed between the binding polymer and the lens material is a sequential interpenetrating polymer network.
34. The mold of claim 31, wherein the binding polymer has a molecular weight of about 7,000 to about 40,000.
35. The mold of claim 31, wherein the binding polymer comprises a copolymer of methacrylic acid, 2-hydroxyethyl methacrylate, and lauryl methacrylate.
36. The mold of claim 31, wherein the binding polymer comprises a copolymer of methacrylic acid and 2-hydroxyethyl methacrylate.
37. The mold of claim 31, wherein the binding polymer comprises a homopolymer of 2-hydroxyethyl methacrylate.
38. The mold of claim 31 –37 wherein the one or more solvents comprises two medium boiling point solvents and one low boiling point solvent.

39. The mold of claim 38, wherein the two medium boiling point solvents
comprise 1-ethoxy-2-propanol and isopropyl lactate.
40. The ophthalmic lens derived from the colorant of claim 23, the method of
claim 30 and the mold of claim 39.
41. The method of claim 24 wherein said pigment is coated or wetted with
said binding polymer.